

Remarks

The final Office Action mailed January 6, 2006 provided a final rejection of all pending claims 1-13. Reconsideration of this final rejection is respectfully requested.

Rejection of Claims Under 35 U.S.C. §102(e)

Claims 1-11 were finally rejected as being anticipated by U.S. Patent No. 6,850,386 issued to Kovinskaya et al. ("Kovinskaya '386"). Claims 12-13 were finally rejected as being anticipated by U.S. Patent No. 6,594,105 to Brittner ("Brittner '105"). These rejections are respectfully traversed, and will be discussed in turn.

1. Kovinskaya '386

The Applicant submits that Kovinskaya '386 at least fails to disclose "a function that causes a first derivative with respect to time of the reference velocity to *vary linearly with respect to time.*" (Claim 1, emphasis added). In sustaining the final rejection of claim 1, the Examiner identified acceleration curve 140 in FIG. 3 of Kovinskaya '386 as meeting this limitation. This is respectfully traversed.

As pointed out in the Applicant's Response of October 25, 2005, the acceleration curve 140 of FIG. 3 is a third-order polynomial function with respect to time (time= t) with t^3 , t^2 and t^1 terms. See equation (5) at col. 5, line 40; see also col. 4, lines 55-56.

A skilled artisan would clearly view this third-order function as a *non-linear* function with respect to time. The skilled artisan would thus readily conclude that Kovinskaya '386 fails to disclose "a function that causes a first derivative with respect to time of the reference velocity to *vary linearly with respect to time.*"

The Examiner nevertheless sustained the final rejection of claim 1 on the basis that the acceleration curve 140 in FIG. 3 of Kovinskaya '386 had portions that appeared to vary linearly with respect to time. (See final Office Action, page 4, lines 17-18: "*As seen from figure 3, the acceleration (first derivative of the velocity) does vary linearly.*"). This is respectfully traversed.

The Applicant respectfully submits that no portion of curve 140 in FIG. 3 in fact appears to vary linearly with respect to time; careful examination of curve 140 shows it to be continuously curvilinear.

However, even if portions of curve 140 did appear to vary linearly with respect to time, this is insufficient to support the rejection under §102(e). It is long settled that anticipation of claim terms cannot be shown by relying on patent drawings apart from the associated disclosure in the specification. See *Nystrom v. TREX Co.*, 76 USPQ2d 1481 (Fed Cir. 2005); *Hockerson-Halberstadt Inc. v. Avia Group International Inc.*, 222 F.3d 951 (Fed. Cir. 2000). Since the specification in Kovinskaya '386 explicitly identifies the function as third-order, no amount of visual examination of the graphical representation of the function will avail to prove otherwise.

The final rejection of claim 1 is therefore erroneous *as a matter of law*. Reconsideration and withdrawal of the rejection of claim 1, and for the claims depending therefrom, are respectfully requested on this basis.

As Kovinskaya '386 is similarly deficient with regard to the language of independent claim 4, reconsideration and withdrawal of the final rejection of claim 4, and for the claims depending therefrom, are also respectfully requested.

2. Brittner '105

The Applicant further submits that Brittner '105 at least fails to disclose "a function that causes a first derivative with respect to time of the reference velocity to *vary linearly with respect to time*." (Claim 12, emphasis added). The Examiner sustained the final rejection of claim 12 on the basis of language in Brittner '105 that indicates there are no non-linear terms in the acceleration equation. See final Office Action, page 4, lines 19-21 (*"there are no non-linear terms."*).

This reasoning is respectfully traversed. The Examiner confuses the phrase "a lack of linear terms" which does not appear in claim 12, with the phrase "vary linearly with respect to time" which does appear in claim 12. These phrases describe different characteristics and while Brittner '105 may disclose the first, it clearly does not disclose the second.

Brittner '105 discloses a compound acceleration function with two components: an exponential acceleration (or deceleration) portion superimposed with a constant acceleration (or deceleration) portion. See e.g., col. 3, lines 56-58; col. 6, lines 21-22; col. 7, lines 6-10. FIG. 4 provides graphical approximations of these respective components with the exponential portions in solid lines and the constant portions in dashed lines. The exponential portions result from BEMF generated during acceleration/deceleration of the VCM. See col. 6, lines 5-20; col. 7, lines 15-18; and col. 7, lines 30-32.

It is generally true that Brittner '105 provides linear equations to allow calculations to take place in real time. Col. 6, lines 37-40; col. 7, lines 4-5; col. 7, lines 37-39. Nevertheless, it does not follow that the use of such linear equations provides "a function

that causes a first derivative with respect to time of the reference velocity to *vary linearly with respect to time.*"

Neither the exponential acceleration portions nor the constant acceleration portions of Brittner '105 satisfy the above claim language; clearly, an exponential function does not "vary linearly with respect to time," and a constant function does not "vary linearly with respect to time." In the latter case, the constant acceleration function clearly has no non-linear terms, but the acceleration remains constant (slope=0). Thus, by definition no "varying linearly with respect to time" occurs.

Accordingly, the Applicant respectfully submits that the rejection of claim 12 is improper. Reconsideration and withdrawal of the rejection of claim 12, as well as for claim 13 depending therefrom, are requested on this basis.

Conclusion

This is intended to be a complete response to the final Office Action mailed January 6, 2006. Reconsideration and allowance of pending claims 1-13 are respectfully requested.

Should any questions arise concerning this response, the Examiner is invited to contact the below signed attorney.

Respectfully submitted,

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